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(54) Title: ALBUMIN-BINDING DERIVATIVES OF THERAPEUTIC PEPTIDES

(57) Abstract: Novel polypeptide derivatives having protracted profile of action. The present invention relates to a compound which comprises a therapeutic polypeptide linked to an albumin binding residue via a hydrophilic spacer. The present invention also relates to a compound which comprises a therapeutic polypeptide linked to an albumin binding residue via a hydrophilic spacer that separates the polypeptide and the albumin binding residue with a chemical moiety comprising at least 5 non-hydrogen atoms where 30-50% of these atoms are either N or O. In one embodiment of this invention the spacer is defined as $-(CH_2)_lD[(CH_2)_nE]_m(CH_2)_pQ_q-$, wherein l, m and n independently are 1-20 and p is 0-10, Q is $-Z-(CH_2)_nD[(CH_2)_nG]_m(CH_2)_p-$, q is an integer in the range from 0 to 5, each D, E and G independently are selected from $-O-$, NR^3- , $-N(COR^4)-$, $-PR^5(O)-$, and $-P(OR^6)(O)-$, wherein R^3 , R^4 , R^5 , and R^6 independently represent hydrogen or C_{1-6} -alkyl, Z is selected from $-C(O)NH-$, $-C(O)NHCH_2-$, $-OC(O)NH-$, $-C(O)NHCH_2CH_2-$, $-C(O)CH_2-$, $-C(O)CH=CH-$, $-(CH_2)_s-$, $-C(O)-$, $-C(O)O-$ or $-NHC(O)-$, wherein s is 0 or 1.



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